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file 03028

20 September 1968

"THE ANALYSIS OF RADARS AS A FUNCTION OF PHOTOGRAPHIC GROUND RESOLUTION"

1. All data collection from NPIC PIs and OSI analysts and radar engineers has been completed. The results are presently being compiled into final report form by [] Several findings are clear cut at this time and can be spelled out with confidence.

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2. To review the experimental conditions, precisely controlled photography of nine scale models of Sino-Soviet mobile radars at simulated resolutions of [] was employed. Six NPIC PIs specializing in electronics evaluated the imagery in normal reporting fashion. The PI results were then analyzed for intelligence value by 4 [] radar engineers under operational contract to OSI/DSD.

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3. The available conclusions are as follows:

a. No further information of intelligence value was obtained at resolutions below [] Details observable at resolutions of [] answered no intelligence requirements. (A subjective preference for the best resolutions for mensuration tasks was evidenced, but no gain in accuracy was discovered objectively.)

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b. For about half the targets considered, even the [] resolution level was found redundant. All significant components were identified at the [] resolution.

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c. Gross functional descriptions of the radars were obtained without error at the [] resolution and in most cases were obtained even at the [] level.

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d. Beyond the finest detail intelligence extracted from the imagery, further requirements could be satisfied only by ELINT. Higher resolution photography would not answer any additional intelligence requirements.

NGA Declass Review Complete

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